

REMARKS

Claims 37-62 are pending in the application.

In this response, claims 37 and 44 are amended to obviate the rejection under the first paragraph of 35 U.S.C. § 112. Claims 39-44, 46-49 and 53 are amended to properly depend from their respective independent claims 37 and 44.

In response to the restriction requirement in paragraph 2 of the Office Action, claims 55-62 are withdrawn from consideration. Applicant cancels these claims and reserves the right to include them in a divisional application at a later date.

In view of the above amendments and the following remarks, Applicants request further examination of the application and reconsideration of the rejections set forth in the Office Action dated January 4, 2005.

Claim Rejection Under 35 U.S.C. § 112

On pages 2-3 of the Office Action, paragraphs 4-5, claims 37-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

In response to this rejection, independent claims 37 and 44 are amended to clarify that the crosslinkable composition crosslinks to form a crosslinked polymer matrix when, or as, the composition is applied to a surface of a compressible mat. This language is supported in the specification, for example, on page 5, lines 30-31; and page 6, lines 7-8.

Applicants submit that claims 37-54, as amended, particularly point out and distinctly claim the subject matter, as required by 35 U.S.C. 112, first paragraph. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejection Under 35 U.S.C. § 103

On pages 3-4 of the Office Action, paragraphs 6-7, claims 37-54 are rejected under 35 U.S.C. § 103(a) as obvious over van der Hoeven (US 4,789,604) in view of Helmer et al. (WO 96/22338). On page 3 of the Office Action, final paragraph, it is contended that it would have been obvious to one of ordinary skill in the art to use the polymers in Helmer '338 in the process described in van der Hoeven '604 to provide the presently claimed process. As support for this

combination, it is contended that a skilled artisan would make this substitution to achieve faster curing in the process described van der Hoeven '604.

This rejection is respectfully traversed for the reasons that follow.

The present invention provides a cost-efficient manufacturing process for manufacture of polymer coated (primed) composition substrates directly from the press. Once the primer coating is applied to a compressible mat, the presently claimed process does not require that the primer coating on the composition substrate undergo any extra processing or heating/drying steps to form a cured composite material.

The van der Hoeven '604 reference describes a process for making a decorative panel. Referring to cols. 9-10 and Fig. 1 of the '604 patent, layer of a polymerizable composition 2 is applied on a substrate of kraft paper 1. A film 3 is then applied on top of the polymerizable composition 2, and the polymerizable composition is crosslinked by radiation in the zone 4. Following the crosslinking step, the film 3 is removed. The structure including the crosslinked layer 2 and the kraft paper layer 1 is then placed on a composite material and cured under heat and pressure.

Col. 7, lines 50-67 of the van der Hoeven '604 patent state as follows:

The application of the covering film [3] to the liquid layer [2] still capable of polymerization by radiation is effected by first applying this liquid layer to the substrate in the manner described above and then providing it with the covering film [3], the rough side of the surface of the covering film [3] coming into contact with the liquid polymerizable layer [2]...

The roughness of the surface is transferred to the surface of the layer to be polymerized by radiation, which then assumes the surface structure of the covering film and obtains a mat appearance...¹

The statements at col. 7 of the van der Hoeven '406 patent make clear that the layer 2 is not in the form of a crosslinked matrix when or as it is applied to the kraft paper substrate 1. Instead, the layer 2 is a liquid that is forced between the kraft paper substrate 1 and the textured film 3 at the rollers 8, 9. The liquid layer 2 then coats the textured film 3, and is subsequently crosslinked in the zone 4. When the textured film 3 is stripped away following crosslinking, the

¹ Bracketed references added for clarity.

exposed surface of the crosslinked liquid layer 2 retains the texture of the film 3. This textured surface then appears on the outside of the composite material 14 shown in Fig. 1(a) of the '406 patent.

In support of the obviousness rejection, it is contended that one of ordinary skill in the art would substitute the fast setting materials in Helmer '338 for the liquid layer 2 to provide the presently claimed process. The rationale underlying this rejection is that the skilled artisan would desire to achieve more rapid curing. However, van der Hoeven '604 teaches that the material selected for the layer 2 remains in liquid form until it is applied to the textured film 3 and subsequently crosslinked. The liquid layer 2 must first conform to the textured film 3, and then be crosslinked to provide a surface having the same pattern as the textured film 3.

Assuming that the material selected for the layer 2 formed a crosslinked matrix when or as it was applied to the substrate 1, one of ordinary skill would not expect the crosslinked material to flow easily and evenly onto the surface of the textured film 3 between the rollers 8, 9. If the material 2 failed to flow evenly onto the surface of the film 3, a skilled artisan would not expect it to uniformly reflect the pattern from the film 3 when the material 2 was subsequently crosslinked.

Since the material 2 must conform to the film 3 and accept the pattern thereon, Applicants respectfully submit that one of ordinary skill would have no incentive to replace the liquid 2 in van der Hoeven '406 with a crosslinked matrix such as, for example, the 3- dimensional gel described in the present application on page 5, line 31. Applicants respectfully submit that the argument supporting the obviousness rejection ignores the patterning step in van der Hoeven '406 that takes place between application of the liquid 2 to the substrate 1 and the subsequent curing of the liquid 2.

While one of ordinary skill would be aware that the materials described in Helmer '338 can provide rapid cure times, van der Hoeven '406 fails to teach or suggest that these materials be applied on a composite substrate as a crosslinked matrix, which coated substrate is then placed under heat and pressure as presently claimed. Since the primer layer in the presently claimed process crosslinks when or as it is applied to the substrate, no additional heating or drying steps are required to prepare the primer layer prior to the curing step, and this advantage is neither recognized nor appreciated by van der Hoeven '406.

In summary, van der Hoeven '406 fails to teach or suggest selection of materials for the layer 2 that form a crosslinked matrix when or as they are applied to a substrate. Even if one of ordinary skill were in possession of the rapidly crosslinking material described in Helmer '338, such artisan would not be motivated to use these materials for the layer 2 since a crosslinked matrix would not be expected to provide an effective image transfer from the patterned film 3. For at least these reasons, Applicants respectfully submit that the claims as amended are not prima facie obvious under 35 U.S.C. § 103(a) over the combined teachings of van der Hoeven '406 and Helmer '338. Reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims.

If questions remain regarding any aspect of the above, please contact the undersigned.

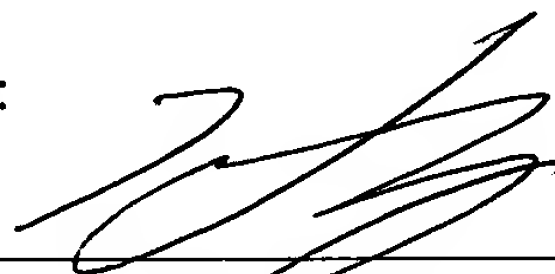
Please charge any additional fees or credit any overpayment to deposit account number 50-1778.

Date:

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